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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,559	09/02/2004	Jonathan James Westhall	04-708	1300
20306	7590	07/10/2006	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP			RUDE, TIMOTHY L	
300 S. WACKER DRIVE			ART UNIT	
32ND FLOOR			PAPER NUMBER	
CHICAGO, IL 60606			2883	

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/506,559	Applicant(s) WESTHALL ET AL.	
	Examiner Timothy L. Rude	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 60-98 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 60-98 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

Claims 1-59 are canceled. Claims 60-98 are added.

Election/Restrictions

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species A, drawn to an optical sensor assembly comprising mandrels (see claim 68) and a protective cover being in the form of a hose filled with buoyant fluid (see claim 86).

Species B, drawn to an optical sensor assembly comprising no mandrel and comprising a support element with an external surface that is compressible (see claim 72) and a protective cover being in the form of a hose filled with buoyant fluid.

Species C, drawn to an optical sensor assembly comprising no mandrel and comprising a support element with an external surface that is not compressible and a protective cover being in the form of a hose filled with buoyant fluid.

Species D, drawn to a plurality of optical sensor assemblies (see claim 83) comprising mandrels (see claim 68) and a protective cover being in the form of a hose filled with buoyant fluid.

Species E, drawn to a plurality of optical sensor assemblies comprising no mandrel and comprising a support element with an external surface that is compressible (see claim 72) and a protective cover being in the form of a hose filled with buoyant fluid.

Species F, drawn to a plurality of optical sensor assemblies comprising no mandrel and comprising a support element with an external surface that is not compressible and a protective cover being in the form of a hose filled with buoyant fluid.

Species G, drawn to an optical sensor assembly comprising mandrels (see claim 68) and a protective cover being in the form of a hose not filled with buoyant fluid.

Species H, drawn to an optical sensor assembly comprising no mandrel and comprising a support element with an external surface that is compressible (see claim 72) and a protective cover being in the form of a hose not filled with buoyant fluid.

Species I, drawn to an optical sensor assembly comprising no mandrel and comprising a support element with an external surface that is not compressible and a protective cover being in the form of a hose not filled with buoyant fluid.

Species J, drawn to a plurality of optical sensor assemblies (see claim 83) comprising mandrels (see claim 68) and a protective cover being in the form of a hose filled with buoyant fluid.

Species K, drawn to a plurality of optical sensor assemblies comprising no mandrel and comprising a support element with an external surface that is compressible (see claim 72) and a protective cover being in the form of a hose not filled with buoyant fluid.

Species L, drawn to a plurality of optical sensor assemblies comprising no mandrel and comprising a support element with an external surface that is not compressible and a protective cover being in the form of a hose not filled with buoyant fluid.

Species M, drawn to an optical sensor assembly comprising mandrels (see claim 68) and no protective cover being in the form of a hose.

Species N, drawn to an optical sensor assembly comprising no mandrel and comprising a support element with an external surface that is compressible (see claim 72) and no protective cover being in the form of a hose.

Species O, drawn to an optical sensor assembly comprising no mandrel and comprising a support element with an external surface that is not compressible and no protective cover being in the form of a hose.

Species P, drawn to a plurality of optical sensor assemblies (see claim 83) comprising mandrels (see claim 68) and no protective cover being in the form of a hose.

Species Q, drawn to a plurality of optical sensor assemblies comprising no mandrel and comprising a support element with an external surface that is compressible (see claim 72) and no protective cover being in the form of a hose.

Species R, drawn to a plurality of optical sensor assemblies comprising no mandrel and comprising a support element with an external surface that is not compressible and no protective cover being in the form of a hose.

Applicant is required, in reply to this action, to elect a single species from A-R to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Please see claim references above.

The following claim(s) are generic: claim 60.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Applicant discloses the above species as independent design alternatives having mutually exclusive features cited above which result in no unity of invention. Each species is considered patentably distinct over the others because there is no single general inventive concept that would prevent any given species from being patentable over any or all of the others.

Please note that there are many claims that might read on additional species that lack any single general inventive concept under PCT Rule 13.1. Examiner reserves the right to do an additional restriction depending upon Applicant's election and the course of prosecution.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Mon-Thurs.

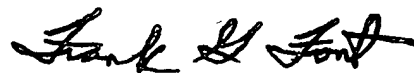
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



tlr

Timothy L Rude
Examiner
Art Unit 2883



Frank G. Font
Supervisory Patent Examiner
Technology Center 2800